

AMENDMENTS TO THE FIGURES

Figures 1 and 5C have been amended as requested by the Examiner. Replacement sheets are submitted herewith.

REMARKS

This is in response to the Office Action of May 30, 2006. With this response, Figures 1 and 5C are amended, the specification is amended and claims 1, 14 and 15 are amended. All pending claims 1-4 and 7-15 are presented for reconsideration and favorable action.

In the Office Action, the drawings and the claims were identified and it was stated that the drawings did not show all of the claimed elements. The drawings have been amended accordingly along with the specification it is believed that the rejection may be withdrawn.

The claims were rejected under 35 U.S.C. § 102(b) based upon Gokcebay et al. (6,374,653), either alone or in combination with Lin (5,447,047).

As amended, claim 1 includes the feature that the locking cylinder is a “keyless” locking cylinder and further that the transponder is a “remote” transponder as indicated on page 5, third paragraph of the present description. It appears to us that the invention as claimed in new claim 1 is new and inventive in view of US 6 374 653 B1 (*Gokcebay et al*) for a number of reasons.

First of all, US 6 374 653 B1 (*Gokcebay et al*) discloses a key and lock combination in contrast to the invention as claimed.

According to *Gokcebay et al* a locking cylinder 194 is provided in which a mechanical key can be inserted. The locking cylinder 194 is arranged in a lever handle 196 which is clearly not a knob as alleged by the Examiner. As described for example with respect to Fig. 12, to open a door provided with a cylinder locking 194, a key 52, 90 (Figs. 7 and 8) has to be inserted into the keyway of the cylinder plug 195. Then the locking cylinder 194 reads data from the key 90 and determines whether the key ID# is contained in the cylinder database. If Yes, the cylinder locking 194 checks if the key ID# meet the criteria for access at this time and if the criteria are met (Yes) a solenoid is energized for access. So that when the lever handle 196 is operated the respective door can be opened. In case the key ID# is not contained in the cylinder database or the criteria for access at this time is not met, the solenoid is not energized to allow access.

The key 90 as shown in Fig. 7 provides access to locks which contain a keyway for receiving the key. The key 90 has a key head 93 fitted with a memory cell or identification chip 94 into its cavity 95. When the key 90 is inserted into the receiving cylinder, like the above mentioned locking cylinder 194 or locking cylinder 140 (Fig. 15A) a key contact probe 97 makes contact with a cylinder contact unit 28, so that the locking cylinder can read data such as the key ID# from the memory cell or identification chip 94 of the key 90.

The locking cylinder 194 of *Gokcebay et al* has the disadvantage that its keyway provides a direct access for an unauthorized user to manipulate the cylinder for example by a drill to destroy the locking member 38 and solenoids 36. In particular, an unauthorized user can easily destroy the keyway and cylinder contact unit 28, so that the key contact probe 97 cannot make contact with the cylinder contact unit 28 and thus makes the cylinder inoperable. Furthermore, a high voltage can be applied to the locking cylinder and its keyway, so that the lock electronics comprising for example the printed circuit board 43 and its components 32, 34 and 40 can be destroyed.

A further disadvantage is that due to the open keyway contact and corrosion problems can occur. Further, the structure inside the locking system is more complex, since the locking cylinder is used as an electrical and mechanical system. In particular, a cylinder contact unit 28 has to be provided so that a key contact probe 97 is able to make contact with the locking cylinder and so that it is possible to read the key ID# from the chip inside the key. These disadvantages can be avoided by the locking cylinder as claimed in which a wireless signal is received from a remote transponder. Further a wireless cylinder lock can be read out and programmed by a router, without the transponder.

In contrast to *Gokcebay et al* which discloses a key and lock combination, the invention as claimed provides a remote transponder and keyless lock combination. The invention has therefore the advantage that the knob of the lock is not accessible from the outside and can therefore not be manipulated as the locking cylinder disclosed in *Gokcebay et al* by an unauthorized user through a keyway.

Further, the function of the locking cylinder claimed in claim 1 is completely different from the function of the locking cylinder of *Gokcebay et al.*

According to claim 1, the keyless locking cylinder comprises an access control means which comprises means for exchanging a wireless signal with a remote transponder. In case the keyless locking cylinder receives a signal from the remote transponder the verification means of the locking cylinder verifies whether or not the remote transponder and its user are authorized. In case the verification means determines based on the transponder signal that the user is authorized the access control means permits the opening of the door by making it possible to actuate the knob from the outside of the door.

In contrast thereto, according to *Gokcebay et al* the key 90 has to be inserted into the keyway of the locking cylinder so that key contact probe 97 is able to make contact with the cylinder contact unit 28 so that the key ID# can be read from the memory cell or the identification chip 94 located inside the key. In contrast to the allegations of the Examiner, the key 90 is clearly not a transponder and in particular not a remote transponder. Again, the key has to be brought into direct contact with the locking cylinder, it is not possible to use the key to remotely activate the locking cylinder as it is the case in the invention as claimed.

According to claim 1 the locking cylinder can be remotely activated by transmitting a wireless signal from a remote transponder to an access control means of the locking cylinder, which allows actuation of the knob of the locking cylinder when the signal is an authorized transponder signal. The transponder of the invention has the advantage that one single transponder can be used for other applications with a physical or logical access (for example time attendance, other RFID applications etc.). In contrast thereto, a key can be only used with a respective cylinder locking comprising a keyway which is adapted according to the form of the key.

In view of the above amendments and remarks, it is believed that the present application is in condition for allowance. Reconsideration and favorable action are respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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